

# Author index

- Antonelli, C., The role of technological expectations in a mixed model of international diffusion of process innovations: The case of open-end spinning rotors 18 (1989) 273
- Averch, H.A., Exploring the cost-efficiency of basic research funding in chemistry 18 (1989) 165
- Balfoort, C.L., *see* Vos 18 (1989) 51
- Bar-El, R., *see* Felsenstein 18 (1989) 239
- Bean, A.S. and J.B. Guerard, Jr., A comparison of Census/NSF R&D data vs. Compustat R&D data in a financial decision-making model 18 (1989) 193
- Cainarca, C.C., M.G. Colombo and S. Mariotti, An evolutionary pattern of innovation diffusion. The case of flexible automation 18 (1989) 59
- Carter, A.P., Knowhow trading as economic exchange 18 (1989) 155
- Colombo, M.G., *see* Cainarca 18 (1989) 59
- Cordes, J.J., Tax incentives and R&D spending: A review of the evidence 18 (1989) 119
- Craig, B., *see* Pardey 18 (1989) 289
- Eto, H. and M. Fujita, Regularities in the growth of high technology industries in regions 18 (1989) 135
- Felsenstein, D. and R. Bar-El, Measuring the technological intensity of the industrial sector: A methodological and empirical approach 18 (1989) 239
- Freeman, C., H. Krauch and K. Pavitt, Keichi Oshima 18 (1989) 253
- Fujita, M., *see* Eto 18 (1989) 135
- Gold, B., Harnessing the capabilities of CIM: The critical role of senior management 18 (1989) 173
- Guerard, Jr., J.B., *see* Bean 18 (1989) 193
- Hallaway, M.L., *see* Pardey 18 (1989) 289
- Hobday, M., Corporate strategies in the international semiconductor industry 18 (1989) 225
- Jaffe, A.B., Characterizing the "technological position" of firms, with application to quantifying technological opportunity and research spillovers 18 (1989) 87
- Krauch, H., *see* Freeman 18 (1989) 253
- Leydesdorff, L., Words and co-words as indicators of intellectual organization 18 (1989) 209
- Mansfield, E., The diffusion of industrial robots in Japan and the United States 18 (1989) 183
- Mariotti, S., *see* Cainarca 18 (1989) 59
- McKeon, R. and J.A. Ryan, Evaluation of programs promoting technological innovation - The Australian experience 18 (1989) 379
- Meyer-Krahmer, F. and P. Montigny, Evaluations of innovation programmes in selected European countries 18 (1989) 313
- Montigny, P., *see* Meyer-Krahmer 18 (1989) 313
- Mowery, D.C., Collaborative ventures between U.S. and foreign manufacturing firms 18 (1989) 19
- Müller, J., Policy options for government funding of advanced technology - the case of international collaboration in the European Telecommunication Satellite Programme 18 (1989) 33
- Ormala, E., Nordic experiences of the evaluation of technical research and development 18 (1989) 333
- Pardey, P.G., B. Craig and M.L. Hallaway, U.S. agricultural research deflators: 1890-1985 18 (1989) 289

- Pavitt, K., *see* Freeman 18 (1989) 253
- Phillimore, A.J., University research performance indicators in practice: The University Grants Committee's evaluation of British universities, 1985-86 18 (1989) 255
- Ray, G.F., Full circle: The diffusion of technology 18 (1989) 1
- Roessner, J.D., Evaluation of government innovation programs: Introduction 18 (1989) 309
- Roessner, J.D., Evaluating government innovation programs: Lessons from the U.S. experience 18 (1989) 343
- Ryan, J.A., *see* McKeon 18 (1989) 379
- Smith, K., Public support for civil R&D in the U.K.: Limitations of recent policy debate 18 (1989) 99
- Tanaka, M., Japanese-style evaluation systems for R&D projects: The MITI experience 18 (1989) 361
- Vos, C.M. and C.L. Balfoort, Strategic conferencing: A new approach in science policy 18 (1989) 51

# Subject index

## Government

- Policy options for government funding of advanced technology – the case of international collaboration in the European Telecommunication Satellite Programme, J. Müller 33
- Strategic conferencing: A new approach in science policy, C.M. Vos and C.L. Balfoort 51
- Public support or civil R&D in the U.K.: Limitations of recent policy debate, K. Smith 99
- Tax incentives and R&D spending: A review of the evidence, J.J. Cordes 119
- Regularities in the growth of high technology industries in regions, H. Eto and M. Fujita 135
- Exploring the cost-efficiency of basic research funding in chemistry, H.A. Averch 165
- Evaluation of government innovation programs: Introduction, J.D. Roessner 309
- Evaluations of innovation programmes in selected European countries, F. Meyer-Krahmer and P. Montigny 313
- Nordic experiences of the evaluation of technical research and development, E. Ormala 333
- Evaluating government innovation programs: Lessons from the U.S. experience, J.D. Roessner 343
- Japanese-style evaluation systems for R&D projects: The MITI experience, M. Tanaka 361
- Evaluation of programs promoting technological innovation – The Australian experience, R. McKeon and J.A. Ryan 379

## Industry, agriculture and services

- Full circle: The diffusion of technology, G.F. Ray 1
- Policy options for government funding of advanced technology – the case of international collaboration in the European Telecommunication Satellite Programme, J. Müller 33
- An evolutionary pattern of innovation diffusion. The case of flexible automation, C.C. Cainarca, M.G. Colombo and S. Mariotti 59
- Characterizing the "technological position" of firms, with application to quantifying technological opportunity and research spillovers, A.B. Jaffe 87
- Public support or civil R&D in the U.K.: Limitations of recent policy debate, K. Smith 99
- Tax incentives and R&D spending: A review of the evidence, J.J. Cordes 119
- Regularities in the growth of high technology industries in regions, H. Eto and M. Fujita 135
- Knowhow trading as economic exchange, A.P. Carter 155
- Harnessing the capabilities of CIM: The critical role of senior management, B. Gold 173
- The diffusion of industrial robots in Japan and the United States, E. Mansfield 183
- A comparison of Census/NSF R&D data vs. Compustat R&D data in a financial decision-making model, A.S. Bean and J.B. Guerard, Jr. 193
- Corporate strategies in the international semiconductor industry, M. Hobday 225
- Measuring the technological intensity of the industrial sector: A methodological and empirical approach, D. Felsenstein and R. Bar-El 239
- The role of technological expectations in a mixed model of international diffusion of process innovations: The case of open-end spinning rotors, C. Antonelli 273
- U.S. agricultural research deflators: 1890–1985, P.G. Pardey, B. Craig and M.L. Hallaway 289
- Evaluation of government innovation programs: Introduction, J.D. Roessner 309

- Evaluations of innovation programmes in selected European countries, F. Meyer-Krahmer and P. Montigny 313
- Nordic experiences of the evaluation of technical research and development, E. Ormala 333
- Evaluating government innovation programs: Lessons from the U.S. experience, J.D. Roessner 343
- Japanese-style evaluation systems for R&D projects: The MITI experience, M. Tanaka 361
- Evaluation of programs promoting technological innovation - The Australian experience, R. McKeon and J.A. Ryan 379

### Universities and basic research

- Regularities in the growth of high technology industries in regions, H. Eto and M. Fujita 135
- Exploring the cost-efficiency of basic research funding in chemistry, H.A. Averch 165
- Words and co-words as indicators of intellectual organization, L. Leydesdorff 209
- University research performance indicators in practice: The University Grants Committee's evaluation of British universities, 1985-86, A.J. Phillimore 255

### Assessment, planning and management

- Collaborative ventures between U.S. and foreign manufacturing firms, D.C. Mowery 19
- Strategic conferencing: A new approach in science policy, C.M. Vos and C.L. Balfoort 51
- Exploring the cost-efficiency of basic research funding in chemistry, H.A. Averch 165
- Harnessing the capabilities of CIM: The critical role of senior management, B. Gold 173
- The diffusion of industrial robots in Japan and the United States, E. Mansfield 183
- Corporate strategies in the international semiconductor industry, M. Hobday 225
- University research performance indicators in practice: The University Grants Committee's evaluation of British universities, 1985-86, A.J. Phillimore 255
- Evaluation of government innovation programs: Introduction, J.D. Roessner 309
- Evaluations of innovation programmes in selected European countries, F. Meyer-Krahmer and P. Montigny 313
- Nordic experiences of the evaluation of technical research and development, E. Ormala 333
- Evaluating government innovation programs: Lessons from the U.S. experience, J.D. Roessner 343
- Japanese-style evaluation systems for R&D projects: the MITI experience, M. Tanaka 361
- Evaluation of programs promoting technological innovation - The Australian experience, R. McKeon and J.A. Ryan 379

### Countries

#### Australia

- Evaluation of programs promoting technological innovation - The Australian experience, R. McKeon and J.A. Ryan 379

#### International comparisons

- Full circle: The diffusion of technology, G.F. Ray 1
- Tax incentives and R&D spending: A review of the evidence, J.J. Cordes 119
- The role of technological expectations in a mixed model of international diffusion of process innovations: The case of open-end spinning rotors, C. Antonelli 273

*Western Europe*

- Policy options for government funding of advanced technology – the case of international collaboration in the European Telecommunication Satellite Programme, J. Müller 33
- Evaluations of innovation programmes in selected European countries, F. Meyer-Krahmer and P. Montigny 313

*Israel*

- Measuring the technological intensity of the industrial sector: A methodological and empirical approach, D. Felsenstein and R. Bar-El 239

*Italy*

- An evolutionary pattern of innovation diffusion. The case of flexible automation, C.C. Cainarca, M.G. Colombo and S. Mariotti 59

*Japan*

- Regularities in the growth of high technology industries in regions, H. Eto and M. Fujita 135
- The diffusion of industrial robots in Japan and the United States, E. Mansfield 183
- Japanese-style evaluation systems for R&D projects: the MITI experience, M. Tanaka 361

*The Netherlands*

- Strategic conferencing: A new approach in science policy, C.M. Vos and C.L. Balfoort 51

*Nordic Countries*

- Nordic experiences of the evaluation of technical research and development, E. Ormala 333

*U.K.*

- Public support or civil R&D in the U.K.: Limitations of recent policy debate, K. Smith 99
- University research performance indicators in practice: The University Grants Committee's evaluation of British universities, 1985–86, A.J. Phillimore 255

*U.S.A.*

- Collaborative ventures between U.S. and foreign manufacturing firms, D.C. Mowery 19
- Characterizing the "technological position" of firms, with application to quantifying technological opportunity and research spillovers, A.B. Jaffe 87
- Exploring the cost-efficiency of basic research funding in chemistry, H.A. Averch 165
- The diffusion of industrial robots in Japan and the United States, E. Mansfield 183
- A comparison of Census/NSF R&D data vs. Compustat R&D data in a financial decision-making model, A.S. Bean and J.B. Guerard, Jr. 193
- Evaluation of government innovation programs: Introduction, J.D. Roessner 309
- Evaluating government innovation programs: Lessons from the U.S. experience, J.D. Roessner 343